

CLAIMS

1. A method for temporal inversion of a wave corresponding to at least one initial signal $s(t)$, where t is the time, this initial signal $s(t)$ exhibiting a certain central frequency f_0 and a passband Δf , in which method a temporal inversion signal $\alpha \cdot s(-t)$, where α is a multiplicative coefficient and $s(-t)$ is the temporal inversion of $s(t)$, is determined,

characterized in that it comprises at least the following steps:

- a first transformation suitable for lowering the central frequency of the signal and for substantially not causing any loss of information with respect to the initial signal is applied to the initial signal $s(t)$, said first transformation producing a first set of transformed signals comprising at least one first transformed signal $K_i(t)$ of lower central frequency than the initial signal, said first set of transformed signals $K_i(t)$ being representative of said initial signal $s(t)$,

- a second transformation producing a second transformed signal $K'_i(t)$ substantially of the same central frequency as the first transformed signal is applied to each first transformed signal $K_i(t)$, said second transformation thus producing a second set of transformed signals $K'_i(t)$ from the first set of transformed signals $K_i(t)$, said second transformation being chosen so that said second set of transformed signals is representative of the temporal inversion signal $s(-t)$,

- a third transformation which generates the temporal inversion signal $\alpha \cdot s(-t)$ is applied to the second set of transformed signals $K'_i(t)$.

2. The method as claimed in claim 1, in which the passband Δf is less than f_0 .